## Science Collaborative CIU Meeting #7

September 19th, 9:30 a.m. – 11:30 a.m.

## **Present**

City of Homer: Bryan Hawkins (Harbormaster), Jim Hornaday (Mayor, KBRR Community

Council)

DNR: Rick Thompson (Regional Land Manager)

ADF&G: Pattie (Fisheries Habitat)

KBRR Staff: Angie Doroff, Steve Baird, Conrad Field, Carmen Field, Catie Bursch, Terry

Thompson

University of AK Fairbanks: Jeff Freymueller

NOAA: Kris Holderied (Kasitsna Bay Lab Manager) Seldovia Village Tribe: Michael Opheim (by phone)

ACOE: Julie Anderson (Army Corps of Engineers, Civil Works Project Manager)

## **Absent**

City of Homer: Rick Abboud (Planning), Walt Wrede (City Manager)

KP Borough: Tom Dearlove

KBRR Community Council: Bob Hartley

## **AGENDA & NOTES**

1. Introductions and an overview of March 21<sup>st</sup> meeting

- 2. Core Intended User Highlight: Kris Holderied, Director of the NOAA Kasitsna Bay Lab (see attached presentation).
- 3. Discussion on emerging data and potential products from the study Overview of the semi-annual report (results to date):
  - We presented maps of each of four salt marsh sites in the study showing vegetative cover types, results of fish sampling in 2012, and anadromous streams. Based on sediment transport discussions in the 21 March meeting, we worked with a NOAA intern, Taylor Bennett, to provide a poster on sediment transport processes that influence sedimentation around the Homer Harbor. The poster was presented at this meeting and will reside at the City of Homer offices (see attached for maps and poster).
- 4. Presenting results of meeting with City of Homer CIUs (see attached presentation) and seeking more/new input on products:
  - a. Making the Time Scale Relevant to Users Needs: Implementation of plans happens within a 5-year time frame but planning for larger-scale fiscal process is longer.
    - i. The information on RSL may or may not be at a scale that is useful on the short-term decision-making. *There was general agreement from the group on this.*
    - ii. The information is more relevant for long-term budget planning such as 20yr to 50 yr time frame. *ACOE has a longer-term planning*

process (20yrs) for major projects. In general, this still seemed about right from the group.

- b. The City of Homer CIUs recommended the following focal areas to provide higher resolution map products for:
  - i. Homer Harbor (Homer Spit),
  - ii. Kachemak Drive,
  - iii. the Seawall area,
  - iv. Any area where the bathymetry is a shallow basin and would exaggerate effects of RSL change.
  - v. No new sites were recommended by the group
- c. Other information or data layers that are important to decision-making
  - i. For infrastructure and land use planning, include coastal erosion rates to the uplift projections.
  - ii. Physical processes such as sediment transport and coastal erosion are part of the equation.
  - iii. No other data layers were identified at this time
- d. Information Transfer doesn't stop here with the researchers and Core Intended Users. People involved in city planning and budgeting need to be comfortable communicating the results of this study to other people they work with such as ACOE, financial planners, and collaborators.
  - i. Presenting results from the past (1970s), present, and future case scenarios to help frame the discussions.
  - ii. The group liked this idea
- e. How do we share data and data products from this project? *There wasn't a lot of discussion on this, perhaps more will come in the future.*
- 5. Update on Modeling (see attached presentation): Jeff Freymueller presented on an 'accidental tide gauge' for the Peterson Bay CORS site; this is a novel method for determining water level change over time. He reviewed the major models that he will be updating with this and last year's data: ice models and the tectonic model. The first steps are to bring the data from the CORS and bedrock GPS campaigns into existing model structures and evaluate them; the ice model is still being improved and is expected to be complete in fall 2012. The new data will help validate the existing model structures and perhaps shed some light on post seismic, tectonic and glacial rebound sources of land-level change. The surprising result at the moment is that the CORS site on the Homer Spit is significantly different than its nearest neighbor at the Public Works station. All sites are indicating uplift (regardless of whether they are on bedrock on unconsolidated substrates) with the exception of the Homer Spit. At this point, it is unclear if that is true for the entire length of the spit or if there is something unique about the location of the CORS site. Methods for assessing the problem were discussed; if it is reflective of the entire Spit, the harbor area will not be out-pacing global sea level rise.

- 6. Ideas/needs for upcoming December 5<sup>th</sup> CIU meeting: there was a suggestion to have a few more draft products prepared that could help people sort out the time scale for data projections.
- 7. Recap and Closing remarks